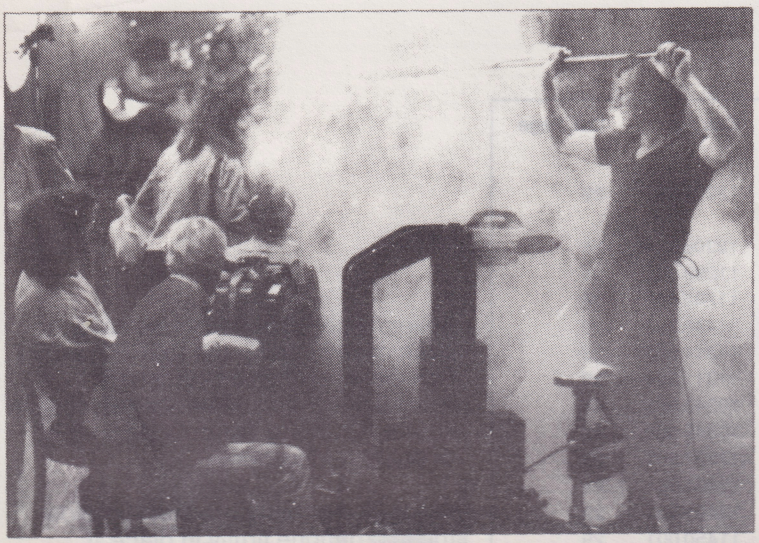
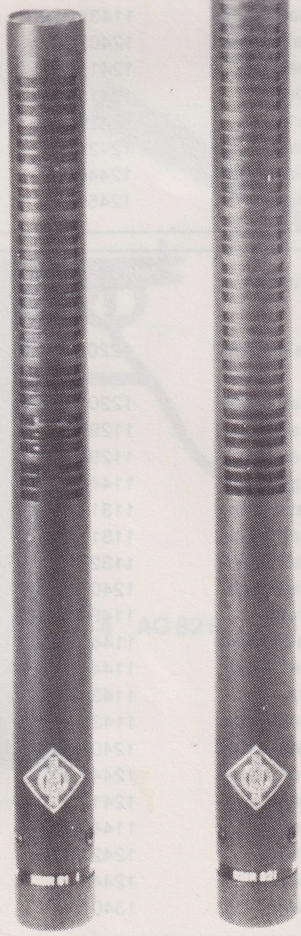
Condenser Shotgun Microphones





KMR 81 i

A condenser shotgun microphone is particularly recommended for use under recording conditions where microphones cannot be positioned within the desired distance of the sound source or, with video recording, when the microphone should not appear on the picture.
The KMR 81 i is a condenser shotgun microphone featuring excellent directional characteristics for its relatively compact dimensions and low weight.
The KMR 81 i combines a high degree of sound rejection at its sides (similar to the hypercardioid: approx. 10 dB), with the high degree of front-to-back rejection of the super-cardioid, likewise 10 dB.
This principle also makes the microphone largely insensitive to wind and popping noises.

KMR 82 i

The NEUMANN KMR 82 i condenser shotgun microphone is characterized by its largely frequency-independent rejection of sound inciding at an angle to the microphone's axis, by its low self-noise and its good transient behaviour. Its small dimensions and lightweight construction with a favourably placed centre of gravity are made for ease of handling. The directional characteristic of the microphone is lobe-shaped.

Type			KMR 81 i
Directional pattern			
Acoustic operating principle			pressure gradient transducer
Frequency range		Hz	40–20 000
Sensitivity[1])		mV/Pa	18
Rated impedance		ohms	150
Equivalent loudness level due to inherent noise	DIN 45405 (1983) CCIR 468-1 (1976)	dB	23
	DIN/IEC 651 (1981)	dB-A	12
S/N ratio re 1 Pa at 1 kHz	CCIR	dB	71
	A-weighted		82
Max. SPL for less than 0.5% THD[2])	without	dB	128
	with preattenuation		138
Total dynamic range of the microphone amplifier[3])		dB	126
Power consumption[4])		mA	0.8
Weight		g	145
Dimensions	diameter	mm	21
	length		226

Condenser Shotgun Microphones

Accessories for KMR Condenser Shot Gun Microphones

Designation	Type	Surface	Cat. No.	Cat. Page
Condenser shotgun microphone	KMR 81 i	satin nickel	12206 003	26
Condenser shotgun microphone	KMR 81 i mt	matt black	12206 004	26
Mains power supply unit	N 48 i-2	matt black	11299 002	34
Battery unit	BS 48 i	matt black	11298 002	34
Active handle	AG 82 i	matt black	11448 002	29
Extension cable	IC 3	satin nickel	11311 003	38
Extension cable	IC 3 mt	matt black	11311 004	38
Swivel mount	SG 21/17	satin nickel	10349 003	44
Swivel mount	SG 21/17 mt	matt black	10349 004	44
Swivel mount	SG 82	matt black	11327 001	29
Quick-release tilting clamp	MKV	matt black	12404 001	44
Mounting bracket	H 82	matt black	12401 001	29
Handle	HG 82	bright	11450 001	29
Elastic suspension	EA 21	satin nickel	10448 001	46
Elastic suspension	EA 21 mt	matt black	10448 002	46
Elastic suspension	EA 82	satin nickel	11447 001	46
Elastic suspension	EA 82 mt	matt black	11447 002	46
Auditorium hanger	MNV 21	grey	11435 001	44
Auditorium hanger	MNV 21 mt	matt black	11435 002	44
Floor stand	M 31	satin nickel	12407 001	41
Table stand	MF 2	matt black	12414 001	40
Windscreen	WS 81	black	12415 001	46
Polyester windscreen	WK 81	grey	12420 001	46
Windjammer	WJ 81	grey	12426 001	46
Miniscreen	MSK 81	black	12448	46
Miniscreen cover	MSCK 81	black	12450	46

Designation	Type	Surface	Cat. No.	Cat. Page
Condenser shotgun microphone	KMR 82 i	satin nickel	12201 014	26
Condenser shotgun microphone	KMR 82 i mt	matt black	12201 015	26
Mains power supply unit	N 48 i-2	matt black	11299 002	34
Battery unit	BS 48 i	matt black	11298 002	34
Active handle	AG 82 i	matt black	11448 002	29
Extension cable	IC 3	satin nickel	11311 003	38
Extension cable	IC 3 mt	matt black	11311 004	38
Swivel mount	SG 82	matt black	11327 001	29
Mounting bracket	H 82	matt black	12401 001	29
Handle	HG 82	bright	11450 001	29
Elastic suspension	EA 82	satin nickel	11447 001	46
Elastic suspension	EA 82 mt	matt black	11447 002	46
Auditorium hanger	MNV 21	grey	11435 001	44
Auditorium hanger	MNV 21 mt	matt black	11435 002	44
Floor stand	M 31	satin nickel	12407 001	41
Table stand	MF 3	matt black	12442 001	40
Windscreen	WS 82	black	12412 001	46
Polyester windscreen	WK 82	grey	11449 002	46
Windjammer	WJ 82	grey	12427 001	46
Miniscreen	MSK 82	black	12449	46
Miniscreen cover	SSC 81	black	13401	46

Several special accessories have been developed for the KMR 82 i condenser shotgun microphone to ensure optimum adaptability to location sound recording, fishpole, floor stand or boom applications.

The H 82 mounting bracket (1) holds the microphone firmly in place. It attaches to the SG 82 swivel mount (2), the HG 82 handle (3), or the AG 82 i active handle (4; see overleaf for detailed information on active handle).

The EA 82 elastic suspension (5) is used to prevent the microphone from being exposed to mechanical vibrations. It attaches to the swivel mount, the handle, or the active handle the same way the H 82 mounting bracket does.

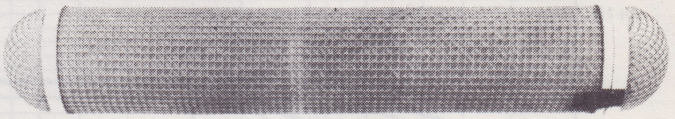
For outdoor applications we recommend use of additional protection from wind noise. The WS 82 polyurethane windscreen (6) not only guards against disturbances caused by wind; it also serves as a soft padding when the microphone is transported in its leather carrying case (7) (the WS 82 and the leather carrying case are standard accessoires of the microphone).
If protection from higher wind speeds is required, use of the larger gauzecovered WK 82 polyester windscreen which encloses the entire microphone is preferable.
The EA 82 elastic suspension, the AG 82 i active handle and SG 82 swivel mount have a $^5/_8$″-27 thread for mounting on microphone stands. Using a thread reducer, mounting on $^1/_2$″ or $^3/_8$″ thread studs is also possible. The HG 82 handle has a $^3/_8$″ female thread.

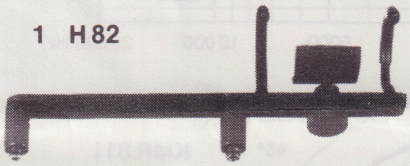
The accessories for KMR 82 i can also be used for KMR 81 i.

6 WS 82

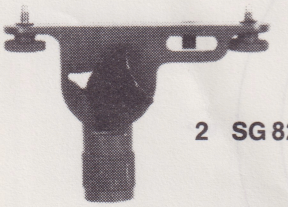
7

8 WK 82

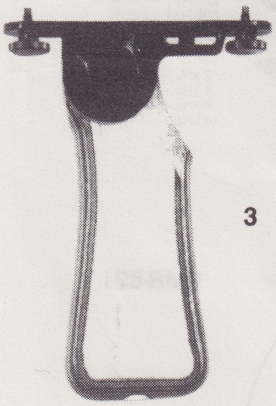




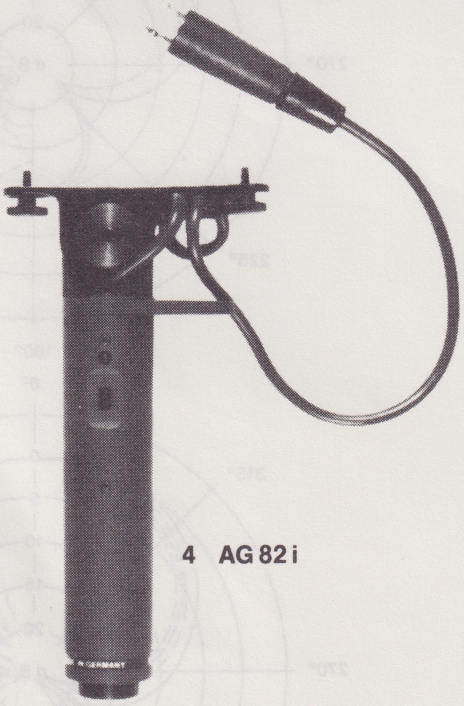
1 H 82



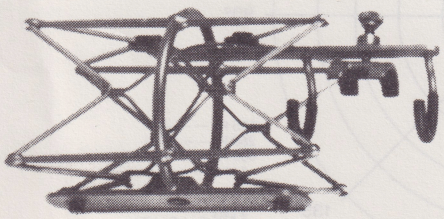
2 SG 82



3 HG 82



4 AG 82 i

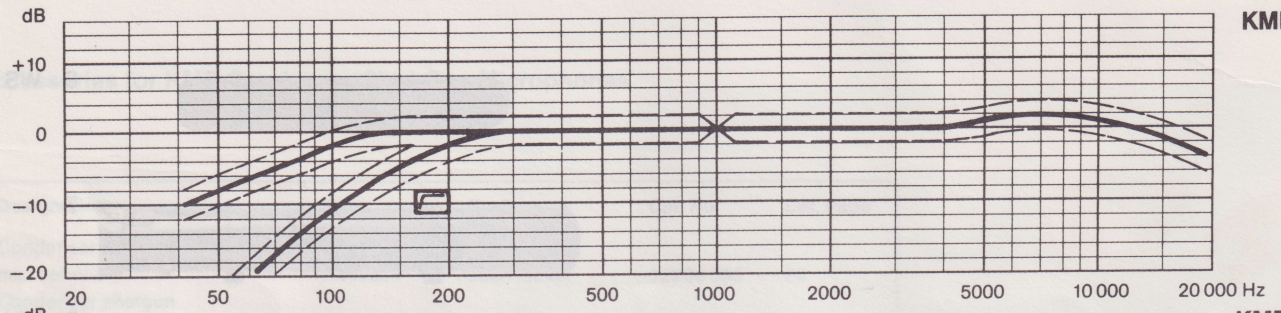


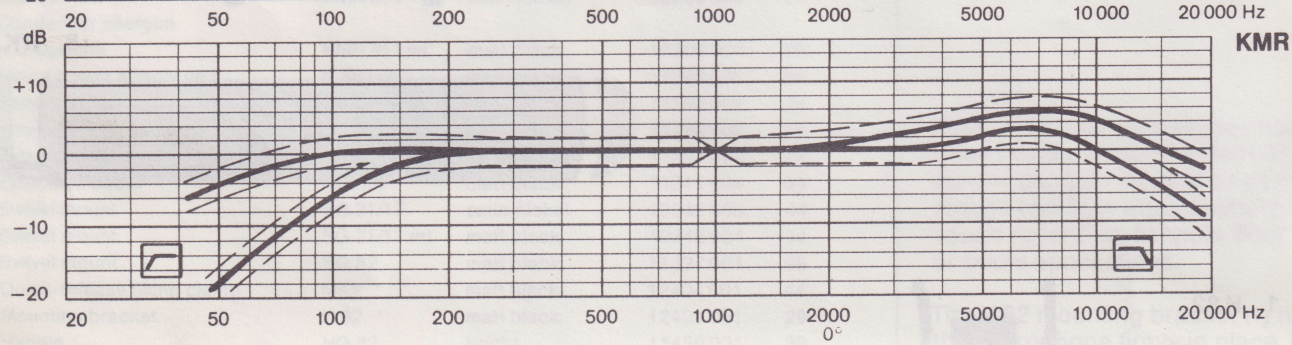
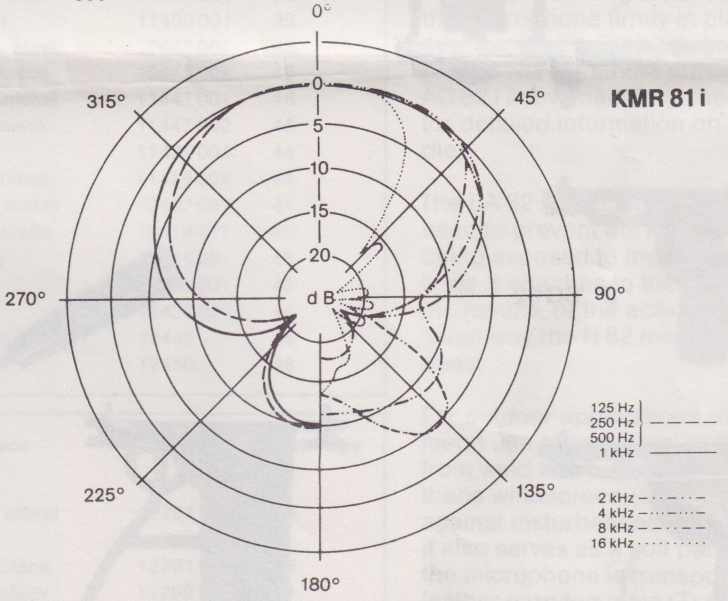
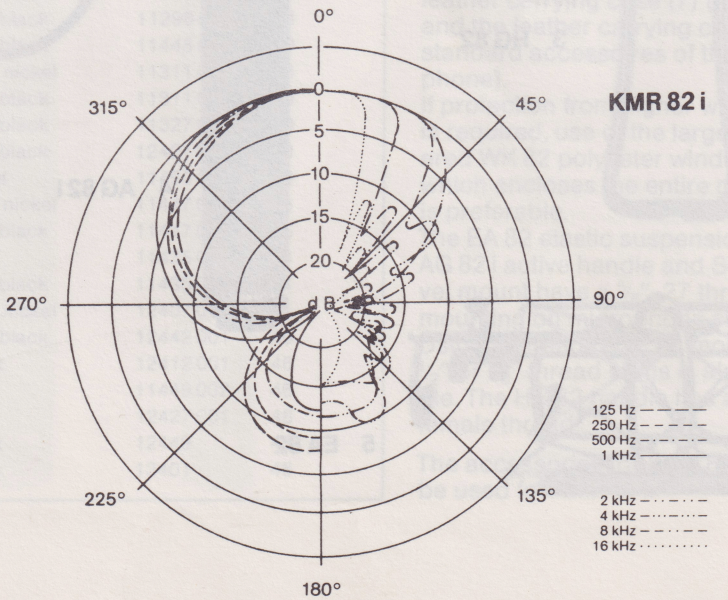
5 EA 82

The AG 82 i active handle has been designed primarily to make the KMR 82 i condenser shotgun microphone independent from an external power supply. It is powered by a standard 9 Volt battery (IEC 6 F 22) whose potential is stepped up to 48 Volts by means of a dc converter. After unscrewing the jacket, the battery is easily installed in the lower part of the handle. A fully charged battery permits at least 10 hours of continuous operation. The cable leading from the top of the swivel mount is used to power the microphone (48 Volt phantom powering, ≦1.5 mA); the connection at the bottom end is the floating, balanced, and dc-free output for transmission of the modulation to any type of input. Decreasing battery voltage is indicated by a flashing light emmitting diode.

Specifications:

Power supply	One 9 Volt dry cell (IEC 6 F 22)
Available phantom powering	48 V at ≦1.5 mA
Microphone input	Balanced, wired to DIN 45 596 for phantom powering
Microphone output	Balanced, floating, dc free
Dimensions	∅ 35 mm, approx. 195 mm long
Weight	480 g (with battery)

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Directional pattern		
Acoustic operating principle		pressure gradient transducer
Frequency range	Hz	40–20 000
Sensitivity[1])	mV/Pa	21
Rated impedance	ohms	150
Equivalent loudness level due to inherent noise	DIN 45405 (1983) CCIR 468-1 (1976) dB	23
	DIN/IEC 651 (1981) dB-A	12
S/N ratio re 1 Pa at 1 kHz	CCIR dB	71
	A-weighted	82
Max. SPL for less than 0.5% THD[2])	dB	128
Total dynamic range of the microphone amplifier[3])	dB	116
Power consumption[4])	mA	0.7
Weight	g	250
Dimensions	diameter mm	21
	length	395